

The Beacon

"By and for emergency responders"

DEPARTMENT OF HEALTH AND HUMAN SERVICES' ROLE AT THE NDPO

The Department of Health and Human Services (HHS) serves as the lead federal agency to coordinate activities within the Public Health and Medical Systems Program (PHMSP) of the National Domestic Preparedness Office (NDPO). This role is consistent with both HHS' traditional roles in disaster preparedness, health and medical crisis and consequence management activities and those presented in recent Presidential Decision Directives.

"HHS (PHS) will be the lead agency to plan and to prepare for a national response to medical emergencies arising from the terrorist use of weapons of mass destruction. HHS, with the support of other Federal agencies, will provide enhanced local response capabilities through the development of Metropolitan Medical Strike Team systems; will develop and maintain the National Disaster Medical System (NDMS), including the National Medical Response Teams; will work with DOD to ensure deployability of NDMS response teams, supplies and equipment; and, working with the Department of Veterans Affairs, ensure adequate stockpiles of antidotes and other necessary pharmaceuticals nationwide and the training of medical personnel in NDMS hospitals." (Presidential Decision Directive #62 - Unclassified)

The two primary roles of HHS within the NDPO include coordination and liaison. In its coordinative role, HHS serves as a "one-stop-shopping" point of information and referral for WMD-related health and medical preparedness issues and questions from stakeholders, states and local jurisdictions. Additionally, HHS participation serves as a mechanism to facilitate the coordination, and review of health and medical issues among the other NDPO program areas, within the interagency community, and among state and local officials.

HHS' presence at the NDPO also serves as the liaison to the Department (HHS), which is developing health and medical programs to counter to the consequences of a domestic terrorist incident involving weapons of mass destruction. These programs include:

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- I. Enhancing local preparedness through the development of Metropolitan Medical Response Systems (MMRS)
- II. Enhancing the National Disaster Medical System (NDMS) to be prepared to respond to WMD incidents at the national level.
- III. Identifying research and development needed to improve civilian medical response to chemical and biological terrorism.
- IV. Developing initiatives to counter the effects of bioterrorism including (1) deterrence of biological terrorism; (2) surveillance for unusual outbreaks of illness; (3) medical and public health response; and (4) research and development.

ORIGINS OF THE METROPOLITAN MEDICAL RESPONSE SYSTEM

The Metropolitan Medical Response System (MMRS) concept began in the Washington Metropolitan area in 1995 beginning with a prototype known as the Metropolitan Medical Strike Team (MMST). The concept of an MMST was actually developed by representative civilian medical first responders and health professionals from around the nation with the assistance from the U.S. Department of Health and Human Services (HHS). Using the combined personnel and equipment resources from Washington D.C., Arlington County, Virginia, and Montgomery and Prince Georges County, Maryland, the MMST was the first of its kind in the civilian environment. Primarily a chemical response team, the MMST was capable of providing initial, on-site, emergency health and medical services following a terrorist incident involving a weapon of mass destruction (chemical, biological, radiological and/or nuclear). The team can provide emergency transportation of patients to hospitals, hospital emergency medical services, mental health services, detection and identification of agents, plans for the disposition of non-survivors and plans for the forward movement of patients to regional health care facilities, as appropriate, via the National Disaster Medical System (NDMS).

Building from the initial efforts of the Washington Metropolitan Area MMST, the HHS Office of Emergency Preparedness (OEP) sought to develop a similar team in the city of Atlanta in preparation for the 1996 Summer Olympic Games.

As a result of the initial successes of the Washington Metropolitan Area and Atlanta MMSTs, Congress, as a part of the Defense Against Weapons of Mass Destruction Act of 1996 (more commonly known as Nunn-Lugar-Domenici), authorized HHS to develop additional MMSTs. This legislation allowed OEP to develop additional MMSTs by contracting with the cities of Boston, New York, Baltimore, Philadelphia, Miami, Memphis, Jacksonville,

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Detroit, Chicago, Milwaukee, Indianapolis, Columbus, San Antonio, Houston, Dallas, Kansas City, Denver, Phoenix, San Jose, Honolulu, Los Angeles, San Diego, San Francisco, Anchorage, and Seattle.

In an effort to show the importance of the system, OEP changed the MMST name to Metropolitan Medical Response System or MMRS. This name change reflected OEP's ongoing effort to bring together not only fire, EMS and HAZMAT communities, but also the jurisdiction's public health and healthcare entities. This is because an effective systems response to chemical, biological, radiological or nuclear incidents will require coordination among hospitals, pre-hospital providers, laboratories, public health officials, poison control centers, mental health professionals, infectious disease experts, surrounding communities, states and the Federal Government.

Today, OEP continues to work with cities and their surrounding communities to develop enhanced response systems. For more information please visit OEP's web site at www.oep-ndms.dhhs.gov.

MMRS - A BOTTOM-UP APPROACH TO RESPONDING TO MEDICAL CONSEQUENCES OF TERRORISM

The U.S. Department of Health and Human Service's (HHS) Office of Emergency Preparedness (OEP) has focused, through the development of the local Metropolitan Medical Response Systems (MMRS), on enhancing local public health and medical capabilities and capacity to respond to terrorist incident involving weapons of mass destruction. This systems development process involves *unique* planning requirements for both chemical and biological incident responses.

The purpose of the MMRS is to ensure that a metropolitan area's health system is able to cope with the human health consequences that can result from a terrorist act. Because each city has a public safety and public health system with unique characteristics, HHS' MMRS development contracts emphasize that each metropolitan area will develop its enhanced medical and health response system within its current emergency response structure. These systems provide an integrated pre-hospital, hospital and public health response capability in local jurisdictions. Each system must ensure that health workers are able to recognize WMD injuries, know the proper treatment, be able to ensure that medical facilities maintain their functional capacities, and plan the integration of state and federal responders when they arrive. HHS' goal is to develop 120 of these medical response systems in the largest metropolitan areas across the country.

CHEMICAL PREPAREDNESS

Prior to MMRS development, it was recognized that most communities possessed some level of hazardous materials response capability. Whether provided through local, regional, public or private systems, planning

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considerations focused on the presumption that existing response systems were not designed to handle the mass numbers of victims potentially associated with the use of a chemical weapon of mass destruction.

The lifecycle of a mass casualty hazardous materials incident without preparedness has the potential to lead to a breakdown of the public health, public safety and emergency management system, eventually leading to chaos. For example, a large scale chemical incident occurs with a report through the traditional emergency 911 system. First responders, initially fire and emergency medical services, arrive, but without appropriate personal protective equipment. Lack of this type of equipment and appropriate training could lead to additional secondary casualties. Hazardous materials teams arrive soon after the initial fire and EMS units, but with minimal PPE and no ability to detect the agent. Patients self-evacuate to area hospitals without treatment or decontamination. EMS units and hospital, with inadequate decontamination capabilities transport and receive “dirty” patients thereby contaminating vehicles, facilities and additional healthcare providers. Hospitals have insufficient pharmaceuticals or knowledge of medical management criteria and the healthcare system is rapidly overwhelmed and eventually collapses.

The same mass casualty chemical incident with preparedness, although difficult to manage, can be approached with a systems approach thereby limiting unnecessary secondary casualties or chaos. With preparedness, the incident occurs. First responders arrive with appropriate PPE and identify the agent. Hazardous materials teams decontaminates victims and notify hospitals of the incident. Hospitals control access to their facilities and prepared to decontaminate patients who have self-evacuated from the scene. On-scene triage and treatment begins and “clean” patients are transported for definitive care. Mutual aid from local, state and Federal agencies is requested and patients are potentially evacuated from the incident site using the National Disaster Medical System (NDMS) to regional healthcare facilities.

BIOLOGICAL PREPAREDNESS

Biological terrorism presents unique challenges, not common to traditional hazardous materials response, chemical, radiological or nuclear terrorism. Unlike chemical terrorism, incidents involving biological agents typically will not involve a fixed site with distinguishable zones of contamination. Rather than detecting an incident from traditional emergency networks (i.e. 911, police, etc.), a biological incident will most likely be first recognized in the hospital emergency department, the medical examiners office or within the public health community.

The consequences of such an attack will present communities with an unprecedented requirement to provide mass prophylaxis to exposed populations, mass patient care, mass fatality management and environmental health clean-up procedures and plans. HHS, through its Centers for Disease Control and Prevention (CDC), is seeking to enhance local, regional and national surveillance systems (detection and laboratory identification). Currently, the CDC is approaching one phase of this task through a cooperative agreement program, also featured in *The Beacon*.

(Cont. p. 5 - Responding)

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By contractually requiring metropolitan areas to develop these elements, there are greater assurances that the overall system will have a coordinated response capability. At the local level, this not only means that communities will be capable of responding to WMD incidents, but they will also be more prepared for the more common hazardous materials incident and the possibility of a naturally occurring outbreak (e.g., pandemic influenza).

USAMRIID CAPABILITIES FOR BIOLOGICAL INCIDENT RESPONSE

The mission of the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) is to develop strategies, products, information, procedures, and training programs for medical defense against biological warfare threats and infectious diseases of military importance that require special containment. USAMRIID also has an integral role in the nation's response to domestic biological terrorism, providing support to the FBI as the lead federal agency for crisis management and the U.S. Department of Health and Human Services as the lead federal agency for health and medical consequence management. Its facilities include 50,000 square feet of Biosafety Level 3 (containment) laboratory space and 10,000 square feet of Biosafety Level 4 (maximum containment) laboratory space, which is specially designed to handle some of the most dangerous pathogens in the world. USAMRIID is a subordinate laboratory under the U.S. Army Medical Research and Materiel Command (USAMRMC), and serves as a research and reference laboratory for the Department of Defense (DoD) and USAMRMC.

USAMRIID provides deployable subject matter experts around the clock for consultation in medical or scientific areas. The Operational Medicine Division has a staff of physicians with expertise in the management of biological casualties, which includes tailoring the medical response, assessing the availability of medical countermeasures, and using the proper channels for obtaining further medical support. In addition, USAMRIID scientists are available for technical advice regarding diagnostics, decontamination, threat evaluation, and other issues. USAMRIID experts are incorporated into numerous national level response teams, providing expertise both at home and abroad.

At the request of the lead federal agency, USAMRIID can provide on-site training to medical professionals and emergency response personnel in the management of biological casualties. USAMRIID subject matter experts are the primary source of medical information dealing with this subject for the federal government.

USAMRIID also produces numerous educational programs and materials. The quarterly in-house course, designed for military medical officers, entitled "Medical Management of Chemical and Biological Casualties," is taught in cooperation with U.S. Army Medical Research Institute for Chemical Defense (USAMRICD). USAMRIID also teaches an exportable version of the course to military medical officers at various locations around the world. A handbook on the medical management of biological casualties, commonly known as "the blue book," was created

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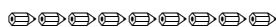
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by USAMRIID and copies are available upon request by writing to USAMRIID, Operational Medicine Division, ATTN: Paul Porreca, Fort Detrick, MD 21702. An annual satellite distance learning course is available for downlink nationwide, and videotapes of the broadcast are also available. A CD-ROM is in development. USAMRIID also has an Internet home page, www.usamriid.army.mil, which provides access to course information and materials.

In The News . . .

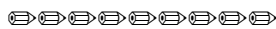
OJP GRANT UPDATE

On May 7, 1999, the Office for State and Local Domestic Preparedness Support (OSLDPS), Office of Justice Programs, announced that applications for equipment and training grants will be available later this fiscal year. Eligible jurisdictions will be contacted directly by the OSLDPS concerning the method by which grants will be administered during FY 1999.



Fast Fact:

The 1995 sarin gas attack on a Tokyo subway claimed the lives of 11 people and injured more than 5,500.



"ISLAND CRISIS 99" DRILL STAGED IN HAWAII

Honolulu emergency responders recently captured their first glimpse of the potential devastation caused by a mass chemical attack during one of the largest preparedness drills ever staged in Hawaii. The exercise, called "Island Crisis 99," took place at Aloha Stadium, and over 100 "victims" acted as if they were contaminated from the lethal and odorless chemical sarin. According to event coordinators, the goal of the scenario was to evaluate Honolulu's capability to respond to an act of chemical terrorism in a public setting. City emergency personnel have been receiving Army training in responding to nuclear, biological, or chemical terrorist attacks since February 1998.

TWIN CITIES PREPARE FOR TERRORIST ATTACK

Downtown buildings in Minneapolis and St. Paul were recently "attacked" by terrorists toting fake nerve gas. The exercise, which featured 500 responders and 200 "victims," is the latest emergency preparedness drill the state of Minnesota has seen in recent history. During the event, respondents had to locate, decontaminate, treat, and transport the volunteer victims to area hospitals.

WORLD HEALTH ORGANIZATION TO RETAIN SMALLPOX STOCKPILES

The 191 member countries of the World Health Organization recently voted not to destroy remaining known samples of the smallpox virus, which were scheduled to be incinerated this month. Health officials instead decided to hold onto existing smallpox stocks, currently stored in the United States and Russia, until as late as 2002, to permit research on developing treatments and an improved vaccine against the disease. The decision reflects growing international concern that additional samples may exist and that smallpox may someday be used as a military or terrorist weapon. A committee of scientific experts oversees smallpox research and periodically inspects laboratories to ensure that the virus is strictly contained.

NEW YORK CITY'S ANTI-TERRORISM EFFORTS GO HIGH-TECH

On June 7th, New York City opened a \$13 million Emergency Operations Center which officials call the nation's leading anti-terrorist response center. The 50,000 square foot facility, which will be staffed round-the-clock, is where city leaders will meet in the event of another man-made act of terror. The center will also be used for natural disasters such as hurricanes, floods, heat waves, and blackouts.

The command center is on the 23rd floor, and its walls are reinforced to withstand gusts of wind up to 160 miles per hour. The building is also bulletproof and bomb-resistant, has its own air supply, an 11,000 gallon water supply, and three backup generators.

The center opened with a 24-hour drill for a mock biological terrorist attack. Many city, state, and federal agency officials were on hand to participate in the exercise.

FEMA ISSUES REVISED FEDERAL RESPONSE PLAN

The Federal Emergency Management Agency (FEMA) recently issued an updated version of the Federal Response Plan. The plan serves as the principal organizational guide for defining the responsibilities of the 26 federal member agencies that are engaged to deliver a broad range of emergency aid during a major crisis.

The revised plan incorporates 11 changes that resulted from the experiences of the federal partners handling emergencies since the original publication date in 1992. Key revisions include the addition of a new evolving Recovery Function Annex, which begins the integration of recovery and mitigation functions into the plan's response structure. Other revisions include four new support function annexes covering Community Relations, Donations Management, Logistics Management and Occupational Health and Safety, and two new appendices for Federal Response Plan Changes and Revisions, and Overview of a Disaster Operation.

(Cont. p. 8 - News)

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Additionally, the revised plan reinforces the use of Incident Command System principles, mentions the importance of private sector partnerships, and describes new response resources. There is also an updated version of the Terrorism Incident Annex, originally published in 1997.

The revised plan is available on FEMA's web site at www.fema.gov. Printed copies can be ordered free of charge as they become available from FEMA's Publications Office at 1-800-480-2520.

ANTHRAX AS A BIOLOGICAL WEAPON - MEDICAL AND PUBLIC HEALTH MANAGEMENT

JAMA 1999; 281: 1735-1745
Thomas V. Inglesby, MD, et al.

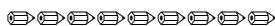
Objective: To develop consensus-based recommendations for measures to be taken by medical and public health professionals following the use of anthrax as a biological weapon against a civilian population.

Participants: The working group included 21 representatives from staff of major academic medical centers and research, government, military, public health, and emergency management institutions and agencies.

Evidence: MEDLINE databases were searched from January 1966 to April 1998, using the Medical Subject Headings *anthrax*, *Bacillus anthracis*, *biological weapon*, *biological terrorism*, *biological warfare*, and *biowarfare*. Review of references identified by this search led to identification of relevant reference published prior to 1966. In addition, participants identified other unpublished references and sources.

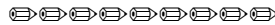
Consensus Process: The first draft of the consensus statement was a synthesis of information obtained in the formal evidence-gathering process. Members of the working group provided formal written comments which were incorporated into the second draft of the statement. The working group reviewed the second draft on June 12, 1998. No significant disagreements existed and comments were incorporated into a third draft. The fourth and final statement incorporates all relevant evidence obtained by the literature search in conjunction with final consensus recommendations supported by all working group members.

Conclusions: Specific consensus recommendations are made regarding the diagnosis of anthrax, indications for vaccination, therapy for those exposed, postexposure prophylaxis, decontamination of the environment, and additional research needs.



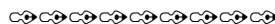
Fast Fact:

During the first five months of 1999, 118 threats involving the possible use of biological weapons have been reported, including 100 anthrax-related threats.



WHAT'S NEW AT THE NDPO

The baseline framework for NDPO Internet site is now on the FBI's Homepage. You can reach the site by going to www.fbi.gov and selecting the "Programs and Organizational Initiatives" button on the side menu; then simply click on the NDPO hyperlink. The NDPO plans to upgrade the site and increase the volume of material that would be of interest to the general public and the emergency response community.



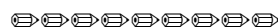
UPDATED COMPENDIUM! The Compendium of Weapons of Mass Destruction Courses sponsored by the federal government has been updated and will be available at www.nbc-prepare.org in July 1999. This edition of the Compendium is now more user-friendly because it features the capability of browsing as well as printing the document.

WEB SITE OF THE MONTH

This month's featured web site is "refdesk.com" located at www.refdesk.com. "Refdesk.com" is a massive Internet link page that includes maps, reference materials, law information, and government resources. When you click on the government link, "refdesk.com" provides a list of state and federal government Web site links that include major programs and organizations. There are also links to "think tanks" such as The Brookings Institution and links for government assistance and tips for grant writing.

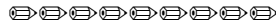
"Refdesk.com" also has a search engine called "Search Google's Uncle Sam," which enables you to search all federal and state government sites for specific topics. For example, when you enter "domestic preparedness," a comprehensive list of federal sites is compiled, including DoD, FEMA, DOJ, EPA, and DOE. The search will also include Congressional records, speeches, testimonies, and publications such as the *Edgewood Quarterly*.

Because "refdesk.com" is an enormous site, you can spend some time perusing the list of links. However, if you have a specific topic you are looking for, "refdesk.com" can provide extensive Internet resources through the search engines on the page.



Fast Fact:

Since 1996, the U.S. Army has incinerated over 5,446,400 pounds of sarin nerve gas at the Army's chemical weapons incinerator in Utah.



NDPO LETTERS

Mr. Kuker:

I recently came across a copy of your April 15, 1999 issue of *The Beacon*, the National Domestic Preparedness Newsletter, and I found it very informative and educational . . . How do I get on *The Beacon* mailing list?

Thank you for your letter. The NDPO distributes The Beacon to all FBI field offices. To get a copy of the newsletter, you should contact the WMD Coordinator in your local FBI field office.

Tom Kuker

Mr. Kuker:

I'm a dispatcher, and I just finished reading *The Beacon*, which was interesting. But, my first question is, when are you going to understand that the very first emergency response, to any scene, is the dispatcher?

Thank you for writing. I agree that we must provide dispatchers with the proper tools and training to manage all emergency situations, including those involving WMD.

The NDPO has identified dispatcher training as a critical training gap and is working to address the issue. Recently, the NDPO sponsored a meeting to discuss Guidelines for Responding to Anthrax Threats, which included a discussion regarding protocols for dispatchers. I look forward to reporting our progress and sharing any information that we receive with you in the future.

Tom Kuker

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